

CLAIMS

What is claimed is:

1. An apparatus comprising:

a portable device having a processor and memory coupled to said

5 processor;

a pointer residing in said memory, said pointer identifying the

location of data;

an interface to said portable device wherein said interface is

configured to transmit data to said memory of said portable device when said

10 portable device requests said data.

2. The apparatus of claim 1 wherein said portable device comprises a smart card.

15 3. The apparatus of claim 1 wherein said computer readable environment is stored in a secure environment.

4. The apparatus of claim 1 wherein said data comprises computer readable program code.

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5. The apparatus of claim 1 wherein said interface determines if said

portable device is authorized to access said data prior to transmitting said data to said portable device.

6. A method for adding external memory to a portable device comprising:
5 storing at least one identifier wherein said identifier comprises a location of data;
determining if a portable device having memory has access to said data;
determining if said memory has sufficient capacity to store said
10 data;
obtaining said data from a data source using said at least one identifier.

7. The method of claim 6 further comprising:
15 storing a private key associated with said data in said memory of said portable device.

8. The method of claim 6 wherein said portable device comprises a smart card.
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9. The method of claim 8 wherein said smart card interfaces with a smart

card server.

10. The method of claim 6 further comprising:
obtaining a private key from said memory of said smart card.

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11. The method of claim 10 further comprising:
determining if said private key complements a public key;
permitting access to said data residing on said data source.

- 10 12. The method of claim 6 wherein said determining if said memory has
sufficient capacity to store said data further comprises:
clearing space for said data when said memory is full.

13. A computer program product comprising:
15 a computer readable medium having computer readable program code
embodied therein, said computer readable program code configured to:
store at least one identifier wherein said identifier comprises a
location of data;
determine if a portable device having memory has access to said
20 data;
determine if said memory has sufficient capacity to store said data;

obtain said data from a data source using said at least one
identifier.

14. The computer program product of claim 13 further comprising computer
5 readable program code configured to:

store a private key associated with said data in said memory of said
portable device.

15. The computer program product of claim 13 wherein said portable device
10 comprises a smart card.

16. The computer program product of claim 15 wherein said smart card
interfaces with a smart card server.

15 17. The computer program product of claim 15 further comprising computer
readable program code configured to:

obtain a private key from said memory of said smart card.

18. The computer program product of claim 17 further comprising computer
20 readable program code configured to:

determine if said private key complements a public key;

permit access to said data residing on said data source.

19. The computer readable program code of claim 14 wherein said
determining if said memory has sufficient capacity to store said data further

5 comprises computer readable program code configured to:

clear space for said data when said memory is full.

20. A method for adding external memory to a smart card comprising:
storing information required by a smart card on a smart card server;
10 transferring data comprising applications for processing on said smart
card and authorizations and encryption keys for other applications from said
smart card server through a cable to a smart card terminal capable of reading
and writing to said smart card;

transferring said data from said smart card terminal to said smart card
15 through an electrical contact on said smart card;

storing said data on said smart card for processing on said smart card;

processing said data on said smart card for a user;

issuing a request for additional applications as need by said user for
transfer to said smart card together with encryption keys;

20 authentication and authorization of said request by said smart card server
using data on said smart card;

